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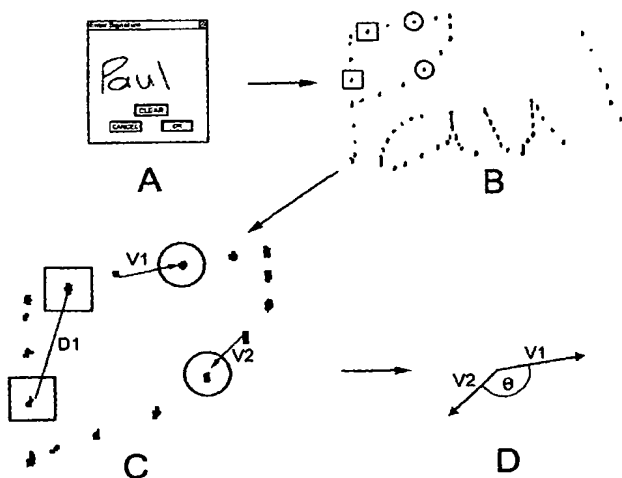
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(54) Title: AUTHENTICATION SYSTEMS



(57) **Abstract:** An authentication system is provided for authenticating a user's signature as electronically inputted into the system by a mouse or other manual input device providing an output indicative of its location when manipulated by the user. The system serves to extract angle and distance data relating different parts of the user's signature inputted into the system, and to store corresponding angle and distance data relating to a reference signature as previously inputted into the system during a training procedure. The extracted data is then compared by the system to the reference data stored by the system, and, where appropriate an output indicative of an appropriate match between the inputted signature and the reference signature is provided in dependence on the result of the comparison. Such a system provides an on-line dynamic biometric verification system that can be customised to multiple Internet based applications requiring secure authentication. The system requires no specialised equipment at the point of use, allowing access from any Internet capable computer with a mouse and Java compliant browser for example.